

REMARKS/ARGUMENTS

Claims 18, 20 – 22, 24 – 34, 36 – 40, 42 – 44, 46 – 56, 58 – 61, 63 – 65, 67 – 77, 79 – 85, 87 – 89, 91 – 101 and 103 were previously pending. As noted above, claims 18, 37 – 40, 59 and 80 – 83 have been amended. Support for these amendments may be found throughout the Specification.¹ No claims have been canceled or added. Thus, claims 18, 20 – 22, 24 – 34, 36 – 40, 42 – 44, 46 – 56, 58 – 61, 63 – 65, 67 – 77, 79 – 85, 87 – 89, 91 – 101 and 103 remain pending.

Applicants respectfully request reconsideration of this application based on the following remarks.

Claim Rejections – 35 USC § 101

Claims 18, 20 – 22, 24 – 34, 36, 59 – 61, 63 – 65, 67 – 77, and 79 are rejected under 35 USC § 101, as allegedly not falling within one of the four statutory categories of invention. More particularly, the Examiner asserts that the claims are neither positively tied to a particular machine that accomplishes the claimed method steps nor transform underlying subject matter. Applicants have amended claims 18 and 59 to more particularly point out the tie to a particular machine.

Therefore, based on the foregoing, Applicants respectfully request that the Examiner withdraw the rejection of claims 18, 20 – 22, 24 – 34, 36, 59 – 61, 63 – 65, 67 – 77 and 79 under 35 USC § 101.

Claim Rejections – 35 USC § 103

Claims 18, 21, 22, 24, 27 – 34, 37 – 40, 43, 44, 46, 49 – 56, 59 – 61, 64, 65, 67, 70 – 77, 80 – 85, 88, 89, 91 and 94 – 101 are rejected under 35 USC § 103(a) as being obvious over Xu (US Patent No. 6,963,582) in view of Verma (US Patent No. 6,522,880) and further in view of RFC 2983 by D. Black and still further in view of Rasanen (US Patent Application Publication No. 2005/0227695). Claims 20, 25, 26, 36, 42, 47, 48, 58, 63, 68, 69, 79, 87, 92, 93 and 103 are rejected under § 103(a) as being obvious over Xu in view of Verma, Black, Rasanen and Barany (US Patent No. 7,072,336). Applicants respectfully traverse these rejections.

¹ See, e.g., Specification, paragraphs [0053], [0062] and [0070].

In particular, Applicants submit that Xu, Verma, Black, and Rasanen taken alone or in combination do not disclose or even suggest a mechanism of transferring data in a communication network in which a radio access network (RAN) is configured to transmit to a packet data service node (PDSN) back-pressure messages corresponding to the plurality of tunnels established between the RAN and PDSN, and, more specifically, systems and methods as claimed in amended independent claims 18, 37, 38, 39, 40, 59, 80, 81, 82 and 83, which recite, *inter alia*, a plurality of tunnels between a network access node and a radio access network (RAN) through which data packets are sent, wherein at least one of the tunnels is established such that the RAN is prevented from dropping packets in the at least one tunnel, transmitting from the RAN or receiving at the network access node a back-pressure message, wherein the back-pressure message corresponds to a respective one of the plurality of tunnels and specifies a Packet Session Identifier (PSI), Differentiated Services Code Point (DSCP), and Micro-Tunnel Identifier (MTID) triplet, or transmitting a back-pressure message to the network access node, wherein the back-pressure message corresponds to a respective one of the plurality of tunnels and specifies a Packet Session Identifier (PSI), Differentiated Services Code Point (DSCP), and Micro-Tunnel Identifier (MTID) triplet, wherein if the MTID matches an identifier for the at least one tunnel in which the RAN is prevented from dropping respective data packets, then only the network access node can drop data packets corresponding to the at least one tunnel based on the back-pressure message.

The Examiner asserts that Barany teaches indicating to the RAN whether or not respective data packets carried by the respective tunnel can be dropped (see Office Action, page 13), however, Applicants disagree. Instead, Barany teaches that an IP packet may have an IP header may have a differentiated services (DS) field that dictates a traffic treatment of the IP packet. As such, Barany teaches a packet-based indication of how to treat each individual packet. In contrast, the recited subject matter establishes a plurality of tunnels between a network access node and a RAN independent of a number of air interfaces between the RAN and a respective mobile node, and further establishes at least one tunnel in which the RAN is prevented from dropping packets. Further, the recited subject matter recites a back-pressure message transmitted by the RAN to the network access node, wherein if the back-pressure message includes a tunnel identifier matching the identification of the at least one tunnel, then

only the network access node can drop corresponding packets based on the back-pressure message.

Additionally, the Examiner asserts that Rasanen discloses back-pressure messages. The Examiner relies on paragraph 0040 as allegedly disclosing this feature. However, this passage, at best, describes a general flow control mechanism. Neither the cited passage nor any other portion of Rasanen (or any of the other cited references) discloses or even suggests a back-pressure messages that specifies a PSI, DSCP, and MTID triplet. Further, Rasanen fails to cure the deficiencies of Barany.

Thus, neither Barany nor Rasanen cure the deficiencies of Xu, Verma and Black.

Therefore, based on the foregoing, Applicants respectfully request that the Examiner withdraw the rejection of independent claims 18, 37, 38, 39, 40, 59, 80, 81, 82 and 83 and associated dependent claims under 35 USC § 103(a) as being obvious over Xu, Verma, Black, Rasanen and Barany.

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CONCLUSION

In light of these remarks, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

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